

Second Generation “Fast Track” September 16, 2003

The following is a list of issues that were on the December 6, 2002 Triennial Rulemaking Expedited Rulemaking Issues document, but were not considered ripe by the fast track rulemaking work group and were therefore not included in the rulemaking first notice.

Article 2 candidate changes

Criteria and Methodologies

Methodologies for calculating aquatic life criteria and values

The aquatic life methodologies adopted for the Great Lakes system in 1997 are the best methods currently available for calculating aquatic life criteria and values. The Great Lakes Water Quality Guidance (GLWQG) provided methods to calculate Tier I criteria for substances that have sufficient toxicity data and Tier II values for substances without complete toxicity data. No new methods have been proposed by EPA since the release of the GLWQG. EPA has recently indicated that updating aquatic life methodologies is a priority, although no date to start the process has been set.

Methodologies for wildlife

The wildlife methodologies adopted for the Great Lakes system in 1997 are the best methods currently available for calculating wildlife criteria and values. IDEM does not know of any other scientifically defensible methods currently available for calculating wildlife criteria. The methodology used for the non-Great Lakes system does not account for bioaccumulation or the amount of fish consumed by mammals and birds. The method will not produce criteria lower than the human health methodology used for the non-Great Lakes system and therefore has not been utilized. During the last triennial review workgroup, a modified version of the Great Lakes system methodology was presented to the workgroup that could be used for the non-Great Lakes system.

Methodologies for human health

In 2000 EPA released a new national human health methodology which will be used to develop new national recommended water quality criteria. The new methodology incorporates many of the advances promulgated in the Great Lakes Guidance human health methodology such as the use of bioaccumulation factors and incorporating the assumption of exposure from other sources (relative source contribution). However, the 2000 methodology has some important updates that IDEM should evaluate.

New Indiana Fish Consumption Value

Indiana contracted with Purdue University to conduct a fish consumption study to revise the value used to develop Indiana's human health criteria. This study has been completed. The data need to be reviewed and a new fish consumption value needs to be calculated and incorporated into Indiana's water rules.

Aquatic life, human health and wildlife numeric criteria

New mussel data from EPA calls into question criteria for zinc, copper, and nickel. However, the EPA data are considered preliminary. More testing is supposed to be initiated to confirm the previous testing results. The US Fish and Wildlife Service may object to these criteria if we adopt them without including mussel data on the

grounds that threatened and endangered mussel species will be put at risk. Some criteria (e.g. arsenic, selenium, and silver) will probably need to be discussed in detail.

Fluoride And Sulfates

Table 1 of 327 IAC 2-1-6 has legacy fluoride and sulfates criteria adopted during a previous rulemaking. Tier II fluoride values have been calculated for the Great Lakes system.

Ammonia:

1999 Ammonia Criteria - New mussel data from EPA appears to indicate that the 1999 criteria will be underprotective for a variety of mussel species. EPA data are preliminary however. US Fish and Wildlife Service will probably object to these criteria on the grounds that endangered mussels will be put at risk. EPA is planning on more toxicity testing in order to confirm that mussels are sensitive to ammonia. Indiana has mussels in many of its streams including one globally endangered species.

IDEM Recommendation: Wait for updated studies from EPA in order to recalculate ammonia criteria using mussel data.

Averaging periods for mercury

Averaging the analytical results for mercury to be done on a quarterly basis instead of a monthly basis.

Article 5 candidate changes

Implementation Procedures

Lake and Sinkhole Discharger Rule (327 IAC 5-10-4):

IDEM Recommendation: Update 327 IAC 5-10-4 similar to the proposed revision in the 1999 Triennial Review Second Notice.

Small Sanitary Discharger Rule (327 IAC 5-10-5):

IDEM Recommendation: Update 327 IAC 5-10-5 similar to the proposed revision in the 1999 Triennial Review Second Notice. This would include expanding the applicability of this provision to municipal and semi-public facilities with average design discharge flows greater than the 0.05 MGD cutoff in the existing rule provision.

New Issues:

Procedure to Determine Ambient Concentration of Pollutants in Indiana Waters:

The WQAG developed and recommended a policy for OWQ to follow to determine the ambient concentrations of pollutants in receiving waters. OWQ should consider codifying this policy into rules.

EPA Great Lakes Guidance Excluding Table 5 Pollutants:

In 40 CFR 132.4(e)(2), the Great Lakes Guidance contains an exception that does not require the implementation of Procedures 1-5 and 7-9 in appendix F (Procedure 6 in Antidegradation) in establishing

controls on the discharge of any pollutant in Table 5 of the Guidance. The pollutants are alkalinity, ammonia, bacteria, BOD, chlorine, color dissolved oxygen, dissolved solids, pH, phosphorus, salinity, temperature, total and suspended solids, and turbidity.

This provision was included in the 1999 Triennial Review Second Notice. If Indiana's Great Lakes System rules were revised to include this provision, it would greatly assist in issuing NPDES permits.

Lake and Sinkhole Discharge Rule (327 IAC 5-10-4)

Establish specific effluent limitations for GLI facilities, since the existing limits set forth in 327 IAC 5-10-4(a) do not comply with GLI ammonia criteria. Give consideration to establishing year-round E. coli limits/disinfection requirements (for both inside and outside of the Great Lakes basin) to facilities that discharge within two miles upstream of a lake. IDEM staff also recommends that a provision be added to the rule to allow IDEM to waive the dye-tracing studies and/or well sampling (required by 327 IAC 5-10-4(c)(3), (4), and (5) for facilities that have an existing permitted discharge to a sinkhole. This should be allowed where the permittee can demonstrate that there have been no substantial changes in the area since the last permit issuance to warrant new studies. References to 327 IAC 8-2 need to be updated here as well.